TriQuint expands Mexican facility

TriQuint Semiconductor is to expand its capacity at Matamoros, Mexico. This is its primary location for low-cost assembly & test of and an existing line of optical transmitters, receivers, transceivers and transponders. The expansion will add manufacturing of internal optical engines for lines of current and next-generation products.

New products to be made here include gigabit ethernet transceivers; reaches of 30, 80, and 120km; SFP form factor; SONET/SDH OC-48 trans ceivers; reaches of 15, 40, and 80km; SFP & SFF form factors; SONET/SDH OC-3 and OC-12 transceivers: reaches of 80km; SFP & SFF form factors and fibre channel transceivers; SFP form factor.

"We are leveraging our ability to make our own optical components, chips, and transceiver modules. Our time-tested, low-cost, high-quality, common-platform manufacturing in Matamoros, Mexico offers customers the best value for broad line supply of optoelectronic components and modules," says Glen Riley, VP and GM of TriQuint Optoelectronics.

Newly released components include two modulators, receiver, transmitter, and four laser sources. Expansions include completion of the Netlight Transceiver products covering all ranges, and optical transmit and receive engines to support all reach distance versions of XFP transceiver and X2 transponder modules. Newly released physical layer components are two wideband attenuators.

New 10 Gbit/s optical component introductions include: TGA4953 surface mount 11Gbit/s optical modulator driver; T923 multirate, multiprotocol transmitter; L192 discrete directly modulated laser; D3587 wavelength stabilized, tunable CW laser; E3502 (with integrated wavelength stabilizer) and E3505 (tunable) 2.5Gbit/s lasers; R195A 10 Gbit/s avalanche photodiode receiver; TGL4203 electronically adjustable attenuator and TQL4201-series fixed value attenuators covering DC to 50GHz and 2633 reduced package size Lithium Niobate modulator.

The extension of TriQuint's Netlight, small-form-factor/pluggable line will now provide a full range of transceivers for Gigabit Ethernet, SONET/SDH and Fiber Channel applications that are MSA-compliant and incorporate digital diagnostics.

For OEM manufacturers of modules and system manufacturers of optical linecards, TriQuint has also developed a full line of low-cost, high-performance 10Gbit/s uncooled and cooled Transmit Optical Sub-Assembly and Receive Optical Sub-Assembly engines to support all reach distance versions of the MSA standard XFP transceiver and X2 transponders. The new line, NLX- and SPX-series target the needs of optical communication systems for SONET/SDH, 10Gb Ethernet and 10 Gbit/s Fiber Channel applications. Common packaging and interfaces allows volume cost advantages.

Certification for Optillion

Optillion has achieved ISO 9001:2000 certification for sales, manufacturing and development of fiber-optical transceivers and subsystems for its entire business operation. Bureau Veritas (BVQI) certification organisation, was confirmed after an extensive audit. "ISO certification provides the assurance that Optillion's customers' expectations will be met," said CEO and President, Patrik Evaldsson.

3-inch InP upgrades to 4-inch

Canada's MetroPhotonics has successfully upgraded its Ottowa fabrication line to 4-inch InP wafers, making its fab believed to be the the world's first 4-inch InP line, dedicated to manufacture of photonic integrated circuits.

Upgrading from 3 to 4 inch almost doubles the number of chips per wafer produced, at only a minimal increase in the substrate, epitaxy and processing costs, which results in an overall drastic reduction in the per unit costs.

"Price is ultimately the main industry driver at present," said David Clark, MetroPhotonics.CEO. "Our chips have the functionality that our customers are looking for. The 4-inch wafer line will ensure that we can supply those chips at a price that makes realistic business sense."

In February, MetroPhotonics colaborated with Intelligent Photonics Control on an integrated single chip control solution for MetroPhotonic's SurePath Monitor.

Technology: Optoelectronics

Samsung of South Korea and the Dutch/Korea and LG.Philips plan to increase the prices for 15 and 17inch TFT-LCDs by 3-5%. Currently, capacities are fully employed, whilst demand is still rising. The two producers together control about 40% of the world market.

Intel, Bookham Technology and Santur have formed a multi-source agreement for tuneable lasers, based on the tunable laser implementation agreement of the Optical Internetworking Forum (OIF) in 2002. OIF IA is supported by more than 20 system houses, component manufacturers and chip vendors. The MSA gives system vendors flexibility to source components from more than one tuneable laser manufacturer allowing companies to streamline designs, by standards for functionality, size and optical performance. This results in faster time to market for tuneable laser solutions.

Researchers at the Electro-Optic Information Technology Centre, Harbin Institute of Technology, China have been growing InNd double-doped $LiNbO_3$ (LN) crystals for the first time. The infrared transmission spectra were measured and discussed to investigate structure and defects. The optical damage resistance of Nd:In:$LiNbO_3$ crystals were characterised by the transmission facula distortion method. The optical damage resistance of In(4.0mol%):Nd $LiNbO_3$ was much higher than that of Nd:$LiNbO_3$. The defects examined explain the optical damage resistance in the In:Nd:$LiNbO_3$ crystals.